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| APPLICATION NO.  | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|--|-------------|----------------------|---------------------|------------------|
| 10/502,038   | 02/03/2005  | Shinichi Kai         | 09792909-6474       | 2041             |
| 26263 7590 01/21/2009<br>SONNENSCHN NATH & ROSENTHAL LLP<br>P.O. BOX 061080<br>WACKER DRIVE STATION, SEARS TOWER<br>CHICAGO, IL 60606-1080 |             |                      |                     |                  |
| EXAMINER<br>KEMMERLE III, RUSSELL J  |             |                      |                     |                  |
| ART UNIT   |             | PAPER NUMBER         |                     |                  |
| 1791   |             |                      |                     |                  |
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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

# Office Action Summary

**Application No.**

10/502,038

**Applicant(s)**

KAI ET AL.

**Examiner**

RUSSELL J. KEMMERLE III

**Art Unit**

1791

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 17 October 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-8 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-8 is/are rejected.
- 7) ☒ Claim(s) 2 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SF/ICE)  
Paper No(s)/Mail Date 22 October 2008.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

### **DETAILED ACTION**

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

#### ***Information Disclosure Statement***

The information disclosure statement filed 22 October 2008 fails to comply with 37 CFR 1.98(a)(3) because it does not include a concise explanation of the relevance, as it is presently understood by the individual designated in 37 CFR 1.56(c) most knowledgeable about the content of the information, of each reference listed that is not in the English language. Specifically, a translation of the Japanese Office Action or an explanation of its relevance has not been provided. As indicated on the attached IDS being returned, the foreign patents have been considered (since English translations of at least the abstract were included for each), however the Japanese Office Action has not

#### ***Claim Objections***

In view of the amendments made by the Applicant the previous objections to the claims are withdrawn.

Claim 2 is objected to for an apparent typo, which recites a method according to claim 2. It was assumed for the purpose of this Office action that claim 2 was intended to depend from claim 1.

#### ***Claim Rejections - 35 USC § 102***

Claims 1, 3, 4 and 7 are rejected under 35 U.S.C. 102(b) as being anticipated by Levich (PCT Publication WP 02/49009 A2).

Levich discloses a method of making an optical disc, which includes the step of making a master which is used to form a stamper which is then used to make the optical disc. The step of forming the master includes exposing a photoresist layer on a substrate to polarized photochemically active radiation to form a pattern of convex and concave areas followed by developing the photoresist layer (page 7 lines 1-6, Fig 1). Levich specifically discloses that the photoresist layer may be an inorganic photoresist layer (page 8 lines 11-15).

Levich further discloses that during the exposing step the master is exposed to a real time quality control measure, where the photoresist layer is illuminated in order to obtain information about both exposed and non-exposed regions. The information gathered from this step is used in a feedback loop to adjust the record laser power or recording profile if necessary (page 14 lines 27-31).

Referring to claim 4, Levich discloses that the beam used to test the written information is focused in the area of the writing beam (page 14, lines 17-20).

Thus, Levich discloses every limitation of claims 1, 3, 4 and 7, and thus anticipates the claims.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 2 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Levich in view of Nakagawa (Japanese Patent Publication 55-017152).

Levich is relied upon as discussed above. While Levich discloses the use of an inorganic photoresist layer, it does not disclose that the inorganic photoresist layer contain an incomplete oxide of transition metals.

Nakagawa discloses an inorganic photoresist layer of oxygen short type non-stoichiometric Cr oxide (an incomplete oxide of a transition metal) (abstract).

It would have been obvious to one of ordinary skill in the art, at the time of invention by applicant, to have modified the method of Levich by using the incomplete oxide photoresist layer of Nakagawa. This would have been obvious because they both relate to inorganic photoresist layers, and Nakagawa discloses that the incomplete Cr oxide photoresist layer results in decreased reflectance and less undulations.

Claims 2 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Levich in view of Aki (European Patent publication 0 772 189).

Levich is relied upon as discussed above. While Levich discloses the use of a test laser for detecting what has been written on to the master, it does not teach that the test laser is used to obtain information from an exposed and unexposed area of the master, or that the power of the write laser is controlled so that the ratio between the amounts of reflected light is kept constant.

Aki discloses a method of making an optical disc master and optical discs substantially similar to that of Levich. Aki further discloses that a second laser is irradiated on to portions of the master, both written and unwritten portions, to check for the thickness of the master as well as defects (abstract). The results measured from the second laser are compared to ensure that the thickness is kept constant, and to check for defects, and the laser power is adjusted to maintain a constant thickness level (Col 6 lines 22-34).

It would have been obvious to one of ordinary skill in the art, at the time of invention by applicant, to have modified the method of Levich by using the method of measuring and adjusting taught by Aki. This would have been obvious because Aki

discloses a method of making an optical disc master where defects are detected and the thickness of the master is controlled.

***Response to Arguments***

Applicant's arguments with respect to claims 1-8 have been considered but are moot in view of the new ground(s) of rejection.

***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to RUSSELL J. KEMMERLE III whose telephone number is (571)272-6509. The examiner can normally be reached on Monday through Thursday, 7:00-5:00 EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Steven Griffin can be reached on 571-272-1189. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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/Steven P. Griffin/  
Supervisory Patent Examiner, Art  
Unit 1791

/R. J. K./  
Examiner, Art Unit 1791